

ABSTRACT

The present invention provides the photodetector comprising a lower cladding layer including a n-type doped region, an absorbing layer, an upper cladding layer including a p-type doped region, and ohmic electrodes connected to said lower cladding layer and said upper cladding layer, wherein said p-type doped region extends to be formed into said absorbing layer by a predetermined length.

In accordance with present invention, by reducing effect of the hetero junction barrier where holes move in the intrinsic region, the operating voltage can be decreased and the bandwidth can be improved.